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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,840	09/18/2003	Richard J. Monro	00700-P0049B	4905

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EXAMINER

BASICHAS, ALFRED

ART UNIT PAPER NUMBER

3749

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/664,840

Applicant(s)

MONRO, RICHARD J.

Examiner

Alfred Basichas

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-11 are objected to because of the following informalities: The term "characterized in that" should be changed to --comprising-- or --wherein--, so as to comply with accepted U.S. patent practice. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 2, and 9-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zauderer (6,048,510) in view of Loftus (5,984,665). As mentioned by applicant in

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the disclosure, Zauderer discloses various methods of reducing pollution components with a chemical during the operation of a burner including, among other things, utilizing a chemical such as urea or ammonia injected into a combustion zone and various temperature zones. Zauderer does not specifically recite that the chemical be injected directly into the flame envelope. Loftus teaches reducing pollution components with a chemical in which the chemical is injected directly into the flame envelope in order to reduce emissions (see at least col. 8, lines 17-23). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated the direct injection method of Loftus into the invention disclosed by Zauderer, so as to reduce emissions. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the claimed temperature control and conditions (i.e. stoichiometric or substoichiometric) into the invention disclosed by the above combination, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable arrangement involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

5. Claims 3-7 and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zauderer (6,048,510) in view of Loftus (5,984,665). The combination of Zauderer and Loftus teaches substantially all of the claimed limitations, but does not specifically recite the various mediums for encapsulating the chemical or the various targeted pollutants. Official Notice is given that the various mediums for encapsulating the chemical and the various targeted pollutants are old and well known in the art.

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Modifying a system to utilize a particular medium or to target a particular pollutant is an obvious modification based on design choice, and depends on the desired result. In view of the absence of criticality for these particular design criteria, it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated them into the invention disclosed by the above combination, so as to provide for the desired result.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 703 306 3476. The examiner can normally be reached on Monday through Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308 1935. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0861.

August 29, 2004


Alfred Basichas
Primary Examiner
703 306 3476